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"An investigation, evaluation and development of techniques to enable the spread and adoption of innovative practices, based on the Trent Region Older People Services project (TROPSP)"

A project submitted to Middlesex University in partial fulfilment of the requirements for the Doctor of Professional Studies

Sarah W. Fraser

National Centre for Work Based Learning Partnerships

Middlesex University

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Structure of this Project Report

This report is Part A of two parts. **It is designed to be read and evaluated in conjunction with the exhibits in Part B.** These exhibits comprise of documents, published papers and other printed items of work that were produced as part of this project.

Specifically the reader should note the supporting analyses in Part B: Section A, the content of which will not be reproduced in this report:

1. D.Prof Programme design
2. D.Prof research project aims and background
3. Summary of progress against plan
4. Analysis of Level 5 descriptors as related to this project
5. Researcher's reflective report
6. NHS Trent Region external evaluation of TROPSP project

Section B contains unpublished papers and section C contains published works, organised by the researcher's four personal learning themes.

Contents

2.1. Summary

This report contributes just over a third of the contribution to the researcher's D.Prof programme (*see A1 Exhibits*). It is a synthesis of many different activities and avenues of investigation and learning. This report is about one specific project and is focused on the ways to support the spread and adoption of innovative practices. It is not intended to be a report of the entire D.Prof Programme as the other areas are covered separately (*see Exhibits A1 for D.Prof Programme Design*).

The literature review threw up a number of conflicts of definitions and perspectives, especially in the terminology that can be applied to 'spreading good practice' and 'social marketing'. The many paradoxes and contested concepts are highlighted in the review and the discussion that follows.

Whilst this part of the D.Prof programme is centred on a work-based project – The Trent Region Older People Services Programme (TROPSP) – it has been difficult to separate learning in this project from other work based experiences in the same period. The deliverables and outputs generated (*see Part B Exhibits*) demonstrate both the breadth and depth of the researcher's experience and learning during this D.Prof programme.

The experiential nature of action-based research is highly subjective as the researcher is an active participant in the investigative process, where personal actions immediately affect and have consequences on the context and subject matter under investigation. This report, therefore, needs to be read in the light of its context for the researcher, and understood as a piece of qualitative, action orientated research, rather than an analysis driven by more positivist or scientific values.

The literature review, assessment of the TROPSP project and discussion about the researcher's personal learning themes, combine to produce a set of conclusions and recommendation as diverse and contested as is the topic of interprofessional social marketing itself.

The paradoxes and tensions include: how different theories and frameworks can form unhelpful (or helpful) mental models; the importance of context, perspectives and expectations and how they can influence strategy and implementation of good practice; the tension between the individual and the organisation; how working with key influencers can be as damaging as it can be as supportive; and finally, the issue of whether the aim in social marketing is to spread good practice (Push out) or to enable adoption (Pull in).

The work summarised in this report has received national and international recognition. The contribution to the modernising the NHS has been significant and there is much interest from other countries in using some of the techniques developed and used in the TROPSP work based project. The implications for professional practice, for those working with modernising healthcare as well as specifically for the researcher, are important.

Chapter 1: Introduction

The TROPSP was a collaborative improvement programme designed to deliver improvements in the way in which older people are transferred around health and social care services in the NHS Trent Region (*see Exhibit Part B: Section A: No. 2 – D.Prof research project aims and background*). The programme methodology in itself is designed to support the spread of good practice between the eleven teams involved through a planned programme of training, personal development, sharing of good ideas and facilitation. The collaborative improvement approach consists of four or five workshops of two days each, about three months apart. Between the workshops, teams who are based on geographic communities, test out ideas on how to make improvements and measure their results. This is a proven and successful method for spreading good practice (Flamm, Berwick, & Kabcenell 1998;Kerr et al. 2002;Kilo 1998;Kilo 1999;Leape et al. 2000a;Leape et al. 2000b;Schiff et al. 2001).

The challenge for this doctoral project, as part of the overall doctorate programme (*see Exhibit A1*), was to assess the extent to which this methodology was successful, with particular emphasis on the social processes, as well as to identify and test ways that the good practice identified by the participating teams could be spread to other non-participating individuals and organisations in the NHS.

This project delivered on most of the outputs as defined and agreed in the learning agreement (*see Exhibit Part B: Section A: No. 3 – Summary of progress against plan*). The purpose of this report is to discuss the learnings and the deviations from the plans, in the context of wider theory and the implications for the NHS of the conclusions.

This report will cover:

- Researcher perspective
- A brief summary of the terms and references
- The results of the literature review conducted during and after the TROPSP project, highlighting the areas of specific enquiry; as this is a work based project, the literature review was carried out as a means of exploring the theory behind what the researcher observed, rather than as a standalone academic exercise
- Methodology used
- The project activity – details, including evaluative steps
- Project findings, with specific reference to interprofessional social marketing
- Conclusions and recommendations
- Acknowledgements

Before describing the results of the project, it is useful to pay attention to some definitions, especially as these turned out to be contested. These definitions set the whole context for how the action of spreading good practice takes place, through a process of social marketing. The following definitions and descriptions are important:

1. What is social marketing and why is it a useful 'concept'
2. What is 'good practice' and how can it be defined?
3. What is meant by 'spread'

1.1. Social Marketing

Social marketing is based on the theory that behaviours are influenced through social processes and not hierarchical interventions. This is borne out in much of the literature evaluating the process of change; and specifically in healthcare where general management hierarchy has a limited role in effecting change and improvement (Ferlie, FitzGerald, & Wood 2000). However, it is by no means uncontested and some authors believe it to be an unclear field, with a lack of clarity of role and purpose (Andreasen 1997).

Social marketing addresses the product (the better idea), the segmentation of the potential adopting population, the positioning strategy (how to tap into the individual's motivations) and the marketing activity itself (Smith 2000).

1.2. Good practice

The definition of 'good practice' is a contested one (see Exhibit Part B: Section B: No. 2) (Fraser 2002). Using 'best or good practice' is difficult as it means a lot of research and justification is required by doubting potential adopters before they will consider its worth. On the other hand, 'good ideas' are often too risky for some people to adopt without further proof. The researcher's experience suggests that what matters is the potential adopter's understanding of their current performance and then a curiosity to implement improvements in a way that suits the current context for the person and their work. So, instead, the term 'better practice' has helped potential adopters to realise that a good start is to try and do better, rather than feel overwhelmed by the need to implement a 'gold standard'.

A topic not considered in this report, though it needs to be recognised as an important relating issue, is that of evidence based medicine; how do clinicians in their practice adopt 'evidence'? This is a contested topic and although some of the associated literature has been included in the review, the topic was excluded from this doctoral project.

The terms "good or best practice" are contested, and for the purposes of this report **'better ideas'** is the basis of the *what* that is being, or intended to be, spread. There is some evidence to suggest that individuals adopt 'ideas' more easily than they do what is labelled as 'best practice' (though this may be as much a function of the way it is described as a type or stage of innovation) (Dyer 1998).

1.3. Spread

As a result of the reviews of literature the following set of definitions was used in the project and other research work. These are continuing to develop, as the researcher's ideas develop. They are not discrete definitions as there are overlaps and inconsistencies. However, these words were key for searching strategies and for evaluative activities.

Table 1:

Different definitions and meanings of 'spread' in the context of 'spreading good practice'

Dissemination	An activity where one person or authority actively sends out information, with the expectation that the recipients will act on it. Usually a one off activity without further dialogue or follow up. This is often seen as the predominant method for sharing information and promoting adoption of new behaviours in the healthcare system. It is also evidenced as one of the least effective (Bero et al. 2002).
Diffusion	An instance where good practice moves through the social system and is adopted by other without recourse to managerial oversight. i.e. it is a natural process.
Spread	A 'push out' type intervention that includes both dissemination and diffusion activities.
Adoption	The point at which better practice is implemented. This is closely linked in concept to diffusion and the focus is on implementation of the better practice rather than the change process (Fraser & Plsek 2003).

Roll out	A significantly managerial focused effort to shift better practice to potential adopters. Usually a formal programme in its own right. There is some evidence to suggest that in the public sector, mandating reform and providing supporting funding and structures may accelerate the rate of adoption and change (Tolbert & Zucker 1983).
Scale up	Some projects can be piloted and designed in such a way as to be extended across a wider geographic area. The focus here is on the original design and then a managerial project similar to rollout.

The above definitions and descriptions appear to operate on two different but complementary continua:

(i) progressively more active and interventional activities; from diffusion, through to dissemination and finally implementation (Lomas 1993)

(ii) the focus on individuals through to larger groups

The issues that this raises will be discussed in *Chapter 5: Project Findings*.

Chapter 2: Terms of Reference, Objectives & Literature Review

2.1 Researcher Perspective

The researcher has undergraduate degrees covering Arts and Sciences and a working background that has covered ten years in the private sector and 4 years in health care. Since 2000 she has worked as an independent consultant, working with organisations and national programmes of improvement in the UK health and social care services, in the USA, Sweden and Canada. One of the motivating factors for carrying out this D.Prof Programme was to build on both theoretical and practical knowledge, as well as to extend the knowledge base about how good practice is spread and adopted by others. For the duration of this TROPSP project, the researcher was a paid consultant to the project.

2.2 Terms of reference:

The underlying principles for this project, as agreed in the DPS 4521-Project Plan were:

- To assist the TROPSP Collaborative to achieve its objectives on spreading innovative practices within the Trent Region.
- To support others so they can enable the spread of good practice to individuals and organisations
- To develop a framework for developing a 'spread strategy'

- To provide a number of 'products', such as workbooks, in a timely manner so they can be used by colleagues in the delivery of their work programmes both within and without the TROPSP Collaborative
- To learn through doing and piloting
- To apply evidence on what works
- To acknowledge and share best practise
- To enable a flexible development and implementation process

2.3 Objectives:

Aim

To identify and implement techniques that accelerate the spread of good practice within the NHS; to apply these and to train others in their use.

Objectives & Deliverables

- Produce a framework for implementing a strategy for the spread of learning resulting from the TROPSP; initially within the Region but also to consider spreading throughout the NHS.
- Produce an evolving report on review of the literature linking the topics of the spread of good practice, individual learning and development, education and improvement; publish on website

- Produce a workbook to help leaders design ways to scale up innovation across systems
- Present at two international conferences, the framework developed for the workbook above
- Produce and have published (contract is already in place) a book called "Accelerating the Spread of Good Practice: A toolkit for healthcare"
- Produce a workbook on how to identify and support opinion leaders; submit learnings from this for an international conference
- Produce a workbook on communicating for spread; submit learnings for presentation at an international conference
- Produce a paper, with colleagues from the TROPSP project, combining the topics of complexity, collaboration and spread

Progress against these objectives and deliverables is detailed in *Part B: Section A. 3 – Summary of Progress against Plan.*

2.4. Literature Review

The deliverables agreed in the DPS 4521-Project Plan and specified in 2.3 above did not specifically include a literature review in the traditional pure academic sense. It did include an evolving document taking into account the informal process conducted by the researcher as part of gathering information and background to the topics under study. It was agreed that the literature review process should form

around 20-40 points of the total 140 points available for this part of the D.Prof programme.

Thus the 'literature review' process has been one conducted over a period of time, exploring various topics both informally thorough browsing the literature, as well as formally through doing more thorough searches. The search and review strategy was therefore one that was conducted in cycles of interest (idea – topic – search – review – idea – topic – search etc) rather than the more formal and linear process of searching, then reviewing then summarising the literature.

This informal approach was adopted as it more appropriately fitted the nature of the work based learning project in that it enabled the researcher to explore issues as they were raised rather than limit any searches to what might have been known about the problems before the project began.

There are limitations in this type of review, and one of the most significant is that of coverage. This review is not intended to be a though review of all the literature regarding the topics explored, instead it is intended to guide the researcher to think broadly and deeply about the issues and topics raised by the work based programme.

Another limitation is the breadth of topics. As this project is a general 'change' project there is a vast amount of literature that can be applied to it. The researcher's decision was to focus on the literature based on the diffusion of innovations as this most closely related to the topic of the project and the D.Prof programme as a whole, namely the spread and adoption of good practice. Some of the areas that have been mentioned in *Chapter 4 Project activity* that have not been

included in the literature review include change management, adult learning processes and principles and the collaborative improvement methodology. The reasons for the omission in the review is to focus the review work at a pragmatic level and to keep the focus on the spread of good practice which is the focus for both this project and the D.Prof programme as a whole.

Period of review:	May 2001 to Nov 2002
Search terms:	spread, spreading good practice, diffusion, diffusion of innovations, scaling up, rolling out, improvement project, adoption behaviour, social marketing
Search Strategy:	Informal searches as topics arose during the period of the project, seeking literature in published and unpublished sources in the fields of social sciences, management, healthcare and medical
Databases searched:	www.bids.ac.uk (AHCI, SCI, SSCI) www.emeraldinsight.com www.ncbi.nlm.nih.gov (pubmed) www.doh.nhs.uk

- ✓ *AHCI* covered arts and humanities published works and was chosen specifically to ensure the researcher was not limited to the social science or medical fields
- ✓ *SCI* covered a breadth of major scientific journals
- ✓ *SSCI* provides access to a large range of social sciences related journals
- ✓ *Emeraldinsight.com* is the portal though which access to the leading management journals can be accessed and it is from here than the researcher gained access to up to date and very current literature on emerging topics that is often not available in databases that can take many months to be updated
- ✓ *Pubmed* is the main database for medical journals and supplemented the researcher's access to other science and social scientific journals
- ✓ *DOH* is the Department of Health Database and includes all the formal letters, advice and guidance sent out by the Department of Health, including links to the NHS Modernisation Agency

Other sources considered:

There is considerable 'grey literature' and unpublished work on the issues surrounding how good practice spreads from one profession to another one organisation to another. During the project and D.Prof programme, the researcher has collected much of this from conferences and unpublished reports from colleagues.

In addition may sources of information and ideas came from books published under subjects not specifically directed at contributing to the debate on how good practice spreads. Some of these books were sought and searched for by the researcher, others were recommended by colleagues.

Abstracts considered: 4807

Papers reviewed: 329

The review summarised in this report is specific only to the issues raised in the TROPSP project with regard to how good practice spreads. It is not a comprehensive review of all papers studied.

For the purposes of reviewing the literature, the researcher has focused on the theory of the diffusion of innovations, and then drawn on contrasting literature to assess the theory and identify gaps. This has then been weighed up against the concepts of social marketing to identify any parallels or conflicting views. The reasons for this focus on the diffusion of innovations is because it has been, and continues to be, the predominant paradigm for thinking about how good practice spreads amongst individuals and within and across organisations. By using the diffusion of innovations as the main focus around which to test other theories and approaches, the researcher aims to demonstrate that the issue is a contested one.

2.4.1. The diffusion of innovations

This is one of the predominant theoretical approach taken by researchers, managers and theorists as evidenced by the literature[1]. The approach was named by Everett Rogers whose work in the early 1980's summarised the previous 30 years of research into how innovations diffused through a system (Rogers 1995). He defined diffusion as

> *"the process by which an innovation is communicated through certain channels over time and among the members of a social system"*
> *(Rogers, 1995, ibid p.10)*

The diffusion of innovation perspective was chosen as the basis for this review as it has far more evidence of applicability than the more directive dissemination approach to spreading good practice (NHS Centre for Reviews and Dissemination 1999;Richardson & Droogan 1999;Wong et al. 2000). However, it is a fairly simplistic and over rational view of how individuals adopt better ideas (Ling 2002), and this review captures some of the dissenting arguments.

The remainder of this review is divided into small sections based on particular topics. The purpose in breaking the review into smaller pieces was to help the evaluation and assessment of the TROPSP project. Obviously, there are many overlaps and interactions between each topic, though these dynamics are not covered as part of this review.

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[1] A *medline* and *bids* search using the keyword term "diffusion of innovations" provided details of over 4,000 publications

2.4.2. The *innovation* or *better idea*

The applicability of this theory to the spread of good practice in the NHS is dependent on the definition of innovation and whether this definition includes what might be understood by the term 'good practice'. Rogers assumes that the study of innovation is the study of how good ideas are generated, and that adopting and adapting these ideas to a local context is an innovative process. Peter Drucker defines innovation as 'change that creates a new dimension of performance' (Hesselbein, Goldsmith, & Somerville 2002). An innovation is commonly accepted as something 'new' in the particular circumstance. This element of 'newness' may not always be favourable and Rogers points out that some innovations can be a **bias**; they may not have positive effects or may generate unintended consequences. This aspect is key for the topic of spreading good practice in the NHS – who is to say the innovation or better idea is indeed an appropriate one? Whose perspective matters?

The process of adopting is not just a factor of the individual, but also of the innovation or better idea itself. Uncertainties surrounding the better idea and how it might work, especially if it is a complex set of behaviours such as a single assessment process, where it is difficult for potential adopters to assess all the benefits (Kim & Mauborgne 2000). The dynamic (change over time) complexities underlying both the better idea and the process of diffusion tend to be ignored by much of the diffusion research (Maier 1998). How does an adopter *value* an idea? Different individuals, different professions and different perspectives will have different value systems. A rational approach suggested by Traverso is that value can be determined by assessing the procedure's (or idea's) utilisation, outcomes and cost

(Traverso 1996). Similarly Rogers (ibid, 1995) identifies the five **factors** of an innovation as important in helping adopters evaluate it; relative advantage, compatibility with their values and beliefs, trialability, visibility and reversibility.

However, consider the case of a clinician who has a tendency to request a high number of tests for his patients; what is his motivation for adopting a new test? There is little to suggest that his decision making processes follow a rational process, though his actions may help a new idea, a new test, diffuse rapidly through a system (Burke 1994).

The one factor that a number of authors appear to verify as critical in evaluating a new idea is that of relative advantage – how is this idea better than what currently happens. This is particularly relevant when the less visible, such as clinical and managerial policies, are assessed by potential adopters (Pankratz, Hallfors, & Cho 2002).

One of the ways that better ideas are adopted is when they are classified, in hindsight, as **disruptive innovations** (Goldstein 2001). This behavioural change occurs when innovations make a significant change and provide radically different and improved ways of providing services or products. For example, £10.00 reading glasses available from any retail outlet has had a significant impact on opticians and what and how they provide services, and also on individuals who, on average, have significantly reduced their costs for minor correction of sight difficulties (Christensen, Bohmer, & Kenagy 2000).

The notion of 'better idea' is a relative one; and different perspectives and contexts matter. Whether it is defined as an innovation, good practice, best practice,

better idea – the *what* of spread is highly contextual. There is some evidence to suggest that the relationship between the innovation and the context are so closely entwined that they influence each other to a degree that cannot easily be separated (Ling 2002).

2.4.3. Time

The diffusion of innovations pattern of adoption is represented by an 's' curve, where initial uptake by adopters over time is slow, then it reaches a point at which adoption takes off and the number of adopters increases substantially in a short period of time, and then the rate tails off (Rogers, 1995, ibid). This pattern appears to apply where the innovation or better idea is one that is simple and can be identified, evaluated and adopted by an individual. Once complexities arise in the innovation itself or the context, the rate slows down considerably. In this instance, the cultural characteristics of the organisation also play a significant role in the spread process.

Whilst the management imperative to encourage the adoption of good practice as a means of improving healthcare services is often a short term one (one to three years), the literature suggests that the rate of adoption tends to be far longer, and there are examples where adoption has taken in the region of 15 years (Mallik 1998;Selden 2002).

Different better ideas or innovations will have different incentives for different potential adopter populations, and be different in different contexts. Managerial and clinical incentives do have an impact on the speed of adoption, as do

available infrastructures (Beech & Morgan 1992). This issue of rewards and incentives is important as Rogers points out that preventative innovations, where the payback against a future condition is unclear, diffuse quite slowly (Rogers 2002). Relative advantage, the weighing up of the risks versus the benefits also figure to a large degree, and the way in which these fit with the personal motivations and power structures of the adopting systems, all determines the rate of adoption (Denis et al. 2002).

2.4.4. Communication

Apart from factors such as physical and mental health, age and basic training, the timing of hearing about new ideas plays a role in the potential adopter's behaviour (Jackson 1998).

Communication external to the system is an important factor in attracting attention and raising awareness of an issue. An example is how the media and popular press have had an impact on the medical profession with regards patient safety (Millenson 2002). Mass-mediated communication and coordination of messages may account for a large proportion of positive behaviour change (Elwood & Ataabadi 1997). Finer et al. also suggests that the mass media plays a key role in the dissemination of public health messages (Finer, Tomson, & Bjorkman 1997). Most of the literature advocating the use of public mass media as a communication channel does so for public health messages – the generalisability of this to specific better ideas in health care practice is weak, though Rogers' work on opinion leaders suggests one reason they have the position is because they access information

outside their direct sphere of influence. It is interesting to note that the literature favouring mass communication tends to come under the social marketing paradigm, whilst the diffusion of innovation literature spawns a more personal, peer-to-peer view. Not all the social marketing literature suggests mass communication is useful (Agha & Van Rossem 2002).

This external communication may be a critical factor for social marketing and the spread of good practice. The diffusion of innovations excludes work used in the marketing field called Bass modelling. This theory posits that the adoption curve is not S shaped but rather, the front end tail is replaced with a bulk of adoption occurring at the same time, and then the curve moves onwards like an S curve (Bass, Krishnan, & Jain 1994). Bass modelling, and similar aggregate modelling techniques, also enables some predictive work on what the rate of adoption might be, as opposed to the more descriptive approach used by the diffusion of innovations theorists (Parker 1994;Sillup 1992).

The issue of communication is one where multiple types at the same time are required, in order to reach the targeted audience. Regular dissemination activities based on the 'send out' activity are rarely effective and spread strategies should include a variety of communication activities known to be effective for the topic and the context (van Tulder et al. 2002).

2.4.5 Adopters

Rogers (1995) created five types of adopters, naming them according to the rate at which they adopted a new idea, based on a normal distribution curve;

innovator (first 2.5%), early adopter (next 13.5%), the early majority (34%), late majority (34%) and finally the laggards (16%). There are two ways to view and categorise the potential adopting population – by the characteristics of those who do adopt and when, or the characteristics of resistance, those who choose to take longer. This cumulative adoption over time reflects the capability and opportunity for potential adopters to learn (Deroian 2002).

Rogers' adopter stereotypes are useful, however, they differ per person, per better idea. For example, one person may be an early adopter for one thing and a laggard about another (Booth-Clibborn, Packer, & Stevens 2000;Fischer, Solberg, & Kottke 1998;Sluijs & Dekker 1999). However, despite the potential negative use of the terms and stereotyping, the 'five type of adopters' is a useful mechanism for change agents to understand their adopter population and consider ways to enable adoption (Hilz 2000).

The diffusion of innovation theory appears weak on context and specifically the organisational context within which adopters work. Social marketing and communications research suggests that individuals who take action and implement ideas, rather than just talk about them, have a close identity with the organisation from where the idea comes (Bhattacharya & Elsbach 2002).

2.4.6. Opinion Leaders

An opinion leader is someone whose behaviour has a large influencing effect on others, with regards the adoption of a better idea. When they adopt it, others quickly follow (Rogers 1995)(Moore 1999). This person is only an opinion leader

for that specific better idea, and not necessarily for all ideas. The concept behind the term *opinion leader* is that potential adopters seek information from their peers – this is the most common and most selected strategy. Another term for this role is *innovation carrier* – how individuals carry around good ideas and 'infect' others with whom they come into contact (McKinney, Kaluzny, & Zuckerman 1991). Rappolts' research on opinion leadership suggested just over half of the physicians in his primary care population selected a peer that was readily available and approachable, a quarter selected someone they perceived to be an expert, while the remaining quarter searched the literature. (Rappolt 2002). He also discovered that those who sought advice rarely contacted innovators and rarely questioned the advice they were given.

The use of opinion leaders is important when the majority of the knowledge and information that is shared, that then influences the behaviour of others, comes from informal sources (Asselin 2001).

Knowing about these opinion leaders is one thing, using them to influence systems is another. Research on identifying and training community leaders in India as part of a family planning programme showed the opinion leaders had greater knowledge than their untrained counterparts, however, there was no evidence they had influenced others' behaviour more than colleagues in similar roles (Sharma & Sharma 1996). Valente's approach has been to study how knowledge of the communication networks in a system, particularly those of perceived opinion leaders, can be leveraged to deliver behavioural change (Valente & Davis 1999). He suggests that there are ways, using network knowledge, that opinion leaders can be

used to accelerate the spread of better ideas. However, these networks are very difficult to identify, as they are diffuse and sensitive to investigation (they have a tendency to evaporate when under scrutiny). One way of 'seeing' these networks is to use the proxy measures of professional socialisation and structural location (West et al. 1999).

Some of the factors that make for a good researcher can be perceived as negative e.g. determination, persistence and stubbornness, yet it is these characteristics that adopters seek in their opinion leaders; they want someone who will seek information about the better idea and evaluate its worth on their behalf (Lillehei 1995). So opinion leaders can easily be mistaken for '*resistors*' of change (Locock et al. 2001).

In a review of opinion leaders with regards clinical effectiveness, Locock et al (Locock, Dobson, Chambers, & Gabbay 2001) suggests that the evidence for the effectiveness of these roles is mixed, though there is a case for their educational respect and ability to catalyse others into action. This research also highlights the issue of context (as described 2.4.8 and threaded throughout this review) and the fact that opinion leadership is a relationship, dependent on the context within which they are working, and the quality of their working relationships.

2.4.7 The change agent

Some people have the role of change agent explicitly written into their work roles e.g. primary care cancer leads are required to lead and participate in activities designed to improve the experience of patients with cancer. Some roles are less

formal, such as facilitators, where their objective is to support the process of the adoption of good ideas. This can be quite a task based role, through to a very soft role where the task is to enable and encourage rather than to deliver improvement directly (Harvey et al. 2002). Whatever their role, however formal or informal, change agents need to be flexible and demonstrate ability to work with the context and use a variety of facilitation techniques that best suit the local circumstances (Cahill 1995)

2.4.8 Context

Much of the literature focuses on the diffusion of innovation or spread of good practice as a rational activity, albeit one with a significant social content. Research has established that the social process is important, but what of the social context (Dopson et al. 2002)? This is one area that the diffusion of innovations theory appears to be weak and these challenges are threaded throughout this review, against each of the diffusion of innovations topics. Individuals and teams need to be able to adapt better ideas in a way that makes them make sense in their particular context; this includes being able to make the better idea generalisable and then fit the possible benefits and risks into their own context (Hargadon & Sutton 2000). The idea that better ideas need to be adapted and reinvented into the local context is by no means fully agreed. The process of reinvention is timely and costly and there are times, such as when safety is paramount, when good old fashioned management control may be the most appropriate intervention, for example in a matter of patient or staff safety (Silagy et al. 2002).

To further complicate matters, context can redefine the better idea in a way that is unpredictable. Discussions in the system can influence both the better ideas and the context; the relationships between the two becoming indistinguishable (Maguire 2002). The process of implementation of a better idea is fluid, adaptive and complex (Freeman & Sweeney 2001).

2.4.9 Managerial interventions and organisational context

The concept of diffusion of better ideas is discussed in the research literature as something that occurs in the informal and social system. Yet many of the managerially led interventions, such as getting evidence into practice, or spreading ideas uses this 'soft' and informal process to underpin their more interventionist activities. Is there a dissonance when using one theory to explain a different type of action?

The problem for hierarchical groups such as organisations, is what is perceived as 'islands of activity or excellence'; how can good work be performed by all teams in an organisation? Brommels examined four case studies in Finnish healthcare using the diffusion of innovations model and suggests that without appropriate management commitment, projects may fail (Brommels et al. 1997). Can the spread of better ideas be *project managed* through to implementation and outcome?

There is evidence that organisational factors such as funding, infrastructure, decision making, and commitment can impact the spread of good practice (Hallfors & Godette 2002). Whether the reverse is true – that if these factors exist positively

there be a faster rate of adoption – is unclear. Ash et al suggest that the implementation strategies need to reflect the complexity and design of the better ideas, rather than using a predetermined and fixed way of organising for the spread of good practice (Ash et al. 2001).

One of the advantages organisations have in the quest to accelerate the spread of good practice is the ability to bring groups together and provide a variety of programmes and initiatives designed to share ideas and support personal learning (Becker et al. 2000). For example, one tactic is to combine education sessions with other work going on in the organisation; linking to team objectives, building on improvement projects etc. (DiCenso et al. 2002). This 'social engineering' is recognised as one of the features relevant to social marketing and indeed recognises a societal trend towards seeking socialisation opportunities (Aubert-Gamet & Cova 1999).

Although organisations may provide many of the barriers to change due to their hierarchical construction and the power relations between groups, one advantage to working at an organisational level is the ability to perform diagnostics and assessments as to the feasibility of the adoption of specified ideas. Where the barriers are seen to be technical or structural then the organisation can take action to resolve these; an area where the social system may be unable to sort the problem (Perry 1984;Ziegenfuss, Jr. 1991). However, too much of an authoritarian stance may once again create a barrier, so organisations need to operate in a soft and democratic style if they are to enable the adoption of better ideas (Pearcey & Draper 1996;Witte 1993).

To provide a structure and formal process – or to leave the system to sort itself out informally – which is best? The trick is to find the right balance whilst ensuring sufficient account is taken of the social system and individual creative processes (Gilmartin 1999). Too much formality and the adoption process can end up stifled (Brown & Duguid 2000). This is a particular issue with technological ideas and solutions, such as new computer systems, where the implementation effort is focused on a technical process and the softer social processes are easily ignored, to the detriment of the project (May & Ellis 2001). However, some authors point out that businesses that manage to innovate constantly and replicate new ideas and processes across their organisation are systemised to do so (Hargadon & Sutton 2000).

Along with the issue of formality is also the issue of agency; once one group or organisation professes that it would like other groups to adopt specified ideas, tensions arise in the social system, possibly slowing the rate of adoption (Day & Brown 1986).

2.4.10. Preconditions

In addition to the various characteristics of adopters, the characteristics of better ideas and the process of adoption, one area not explicitly covered in diffusion of innovations theory is the issue of preconditions for change. For example, a primary care practice is unlikely to adopt the use of a fax based referral form for the rapid referral of patients to the local hospital unless it has a fax machine. Whilst this may appear obvious, many top down change initiatives can have the expectation that

all the potential adopting population can (and will) adopt the better idea. The preconditions most easy to identify and work with are structural or visible ones (Rubin et al. 2000).

2.4.11 Individuals or groups

The diffusion of innovations theory is based on how an individual adopts the use of a better idea (singular). One approach is to see all groups as consisting of individuals, each of whom has a different rate of adoption of a specific better idea. Thus the adoption potential of the group is the sum of its individuals (Berlowitz et al. 2001).

An alternative view is to consider groups as *communities of practice* (COP), where knowledge is generated and better ideas implemented through a network of individuals who have a common interest (Lane 2002). The diffusion of innovation theorists suggest the most appropriate way to accelerate change is to enable peer-to-peer discussions. In contrast, COP frameworks indicate that as long as there is a common interest, individuals can influence each other positively, to enable the process of implementing new ideas (Conway, Keller, & Wennberg 1995). For example, these COP can be organised around journal clubs, research interests (Titchen & Binnie 1994).

2.4.12 Targeting

Diffusion of innovations uses the concept of a passive adoption process through a social system. However, theories and evidence from social marketing suggests that there are benefits in accelerating the spread of better ideas if various populations are appropriately targeted. The temptation from central agencies is to disseminate the same piece of information to all potential adopters at the same time. However, evidence suggest that different groups should be involved in different ways, and at different times (Loomis et al. 2002). In the same way that organisations develop business plans, a similar marketing plan can be used when the aim is to encourage the adoption of better ideas (Landrum 1998a;Landrum 1998b).

Targeting is more than segmenting the audience. It also implies that different interventions are used for different audiences and that each intervention needs to be designed to maximise impact (Black et al. 2000;Black, Blue, & Coster 2001). While this preparatory activity may appear onerous, consideration of the analysis and testing of marketing strategies may contribute to success (Martin et al. 1998).

2.4.13 Networks

The diffusions of innovation theory has spawned a variety of network orientated theories, building on the basic concepts though investigating the underlying connections between individuals and groups (Valente 1996;Valente et al. 1997). This has close links with social marketing frameworks, where the development of a network economy is one of the key factors for many marketing

programmes. The development of commercial, social and community networks has been enabled by the use of technological developments. There are many different forms of networks; internal, vertical, inter-market and opportunity and an understanding of these can help when developing marketing or spread plans (Achrol & Kotler 1999).

Some networks are virtual, whilst others are more geographically grounded. Territorial marketing, targeted activities in specific locations, is considered a legitimate marketing pursuit and is relevant to how good practice spreads (or not) (Benko 2000). Research evidence suggests that very tightly connected groups tend not to hear about better ideas and also do not have the opportunity to share their better ideas with others. Similarly, very loose networks and groups are not good sharers of ideas. Valente (1996) introduced the notion of 'weak ties' to describe those individual who help an idea leap from one group to another. There is seldom a direct connection between the adopter and the source of good practice (Lin 1996).

2.4.14 Social Marketing

Although the review so far has used social marketing concepts and principles to counter some of the weaknesses in the diffusion of innovations, this section provides further background. Social marketing is more of a framework than a theory; one which draws on psychology, anthropology, sociology and communications theory. As such is has some limitations and one of these is a weak research base. Although the concepts have been around since 1971 when Kotler and

Zaltman used it to refer to the application of marketing to the solution of health and social problems, it is poorly defined and requires a theoretical base (Lefebvre 1997).

One of the key principles of social marketing is that is puts the consumer at the centre of an initiative (Andreasen 1995). As one of the key principles of Modernisation in the NHS is to put the patient at the centre of their care, this principle is a helpful one. However, the social marketing concept demands that the intervener (the government departments) incorporate the theories of consumer behaviour into their campaigns, thus making change efforts largely behaviourally orientated. What will matter in a social marketing campaign is the consumer's perception of their needs, rather than the perception of someone else (Blair 1995). The consumer is also expected to be an active participant in the change process, as it is his or her own behaviour that is being changed. Thus the relationship between the intervener and the consumer, or patient, needs to be sought at all stages in the development of a social marketing intervention.

Social marketing is not only focused on influencing the behaviour of individuals, but also of groups and societies. It also has a long-term dimension, such as the banning of tobacco advertising.

Another key concept is that the *product* is an intangible one. This is the connection with 'good ideas and good practice' as described throughout this review. Traditional marketing requires a product, something tangible, whereas social marketing assumes the 'what' to be something intangible and in most cases behavioural (Blair 1995). While diffusion of innovations theory covers some

intangible products, the majority of the research and evidence for the theory is based on tangible products for which classic marketing theory also applies. Much of the good practice identified to be spread in this project was intangible behaviour.

In social marketing the target groups are often more difficult to reach. Whereas traditional marketing and mass communications tends to focus on consumers who are able to access the media and are ready for change or open to convincing for change, much of the target audience for social marketing is, by nature, hard to reach. The fact they are a topic for social marketing means they are a challenging market, for example, teenage pregnancy or many of the health promotion topics, where the social, behavioural and psychological resources necessary to make the changes may not be available (Kotler & Zaltman 1997).

As with many health promotion or public health activities or anytime an 'intervener' or regulator is suggesting to another group that there is a better way to do something or to behave, there are ethical issues. Social marketing as a framework, has to work with these ethical dilemmas of who is telling who to do what and why, and whether this is evidenced and for the good of the individual or the whole of society (Burdine 1987). These themes also occur in the diffusion of innovations work, however, they are less contentious where the product is a tangible one and where there is less obvious manipulation or less of a behavioural agenda for change.

2.4.15 Summary

The literature review process provided a theoretical backbone around which the work-based project could be reviewed in an ongoing, action based way. Whilst the focus on the diffusion of innovations literature has its limitations, it did provide the researcher with a focal point around which to assess other contrasting and challenging concepts. The work-based project is inter- and multi-disciplinary and as such, the literature review has covered many theories, concepts and frameworks. One advantage of keeping to the diffusions of innovations theme was to keep the review on the topic of the project – about the spread of good practice. Whilst many theories will also apply, such as adult learning, general changes theory, systems theory, complex adaptive systems, amongst many, the key focus on this project has been how good practice spreads, rather than the need to cover all applicable theories.

The review was not a standalone task. It was performed, informally, side by side with the work-based project. One of the advantages of this was the ability of the researcher to test out published theories and suggestions in a work environment, and to see whether the experiences at work were similar in any way to others' experiences. The review in this section captures some of this action-based learning.

Chapter 3: Methodology

3.1. Research methodology

The approach for this project was based on *action research* as this enabled the researcher to work collaboratively (Hart & Bond 1998) with the client in a context where improvement based on iterative cycles of learning, was the focus. Action research is an evolving process, where the cycle of capturing data, reflection and then applying learning has a direct impact on the project (Bryman 2002;Gill & Johnson 2002). In action research, the researcher is also the practitioner. This practitioner led learning is carried out in the context of studying a social situation with the view to improving the quality of action within it (Winter 1983).

The theme of this doctoral project is how good practice spreads from one person to another, and the action research approach, with its ability to review and appreciate different professional and stakeholding perspectives, proved to be a useful method. There are two main methodologies supporting a study of this kind – theory of the diffusion of innovations, and social marketing frameworks. The theory with the most evidence and precedence is the diffusion of innovations. There is a significant amount of research available and it is well-defined. In contrast, although social marketing as a concept has been around for a similar length of time, it has not evolved into a clear theory and there is a limited amount of published evidence on its applicability to how good practice spreads. The researcher determined that the best option would be to use the diffusion of innovations theory as the key focus for the work, using it as the backbone against which the concepts of social marketing could be tested. The diffusion of innovation theory was thus chosen as the base around

which to explore how social marketing principles might be more appropriate for some health service interventions.

There was also a synergy between the approach for this project and the approach taken by TROPSP teams in delivering improvements. The collaborative improvement methodology used by teams is based on learning from each other and testing ideas for improvement in small scale ways that enable enquiry, learning and action that fits the local context (Besserman et al. 1998;Wagner et al. 2001;Wilson, Berwick, & Cleary 2002).

One of the difficulties in detailing a learning agreement with specific processes and deliverables, is the way the work based project and this programme learning, changes as the work based project progresses. For the most part, in this programme the deliverables have been appropriate though there have been a few exceptions.

The structure and rigour of this programme enabled the researcher to make personal learning explicit and to then influence the nature and direction of the work-based project as it progressed.

3.1.1. Boundaries of the research

It was very difficult to maintain a tight boundary around this programme. For the researcher, all the work carried out that was not part of the TROPSP project, affected the personal learning themes identified for this doctoral programme. It has not been possible to separate out the researcher's learning from this project, from learning in other work areas.

However, despite these overlaps, the TROPSP project had a clear beginning and ending, thus enabling appropriate reflection and evaluation.

3.1.2. Timing & budget

Action research methodology demands a flexible approach. One advantage to managing timescales was the fixed dates of the three key workshops in the 11 months period. This meant any changes and developments, materials preparation etc had to be kept to a strict timetable. By linking this D.Prof programme of work to this strict work-based project timetable helped keep the researcher to the project deadlines.

The TROPSP project was completed within the consultancy budget agreed with the client, including time spent on this D.Prof work.

3.1.3. Working with others

The TROPSP project was supported by Dr Tim Wilson and Paul Plsek, along with the researcher. This worked well, with each person contributing according to their strengths. The researcher carried out all of the workshops jointly with Tim Wilson. This collaborative approach enabled the researcher's personal learning, as it was easy to reflect at the time with someone else, rather than to do post-workshop independent reflection. This was the researcher's first opportunity to run a project jointly with someone else, and the relationship was found to be very useful and stimulating. Having different perspectives, and sometimes they were quite different, had a positive impact on the project and learning.

3.1.4. Ethical Issues

There were no specific ethical issues raised during the project and no difficulties encountered at any stage. What helped with this was the minimal use of patient related data or stories. Also, the discussions held with the project teams are subject to confidentiality and psychological contracts between consultants and clients.

However, the concept of social marketing itself raises ethical concerns about the way in which one individual or group tries to influence another (the TROPSP stakeholders wanted the participating teams to adopt identified better ideas and make specified improvements) (Brenkert 2002;Monberg 1997;Murphy 2002). This fairly 'philosophical' level question has not been considered in detail in this project, though it should be noted.

It helped that Trent Regional Office had carried out similar projects in the past and were very comfortable with formative evaluative processes. This enabled open and honest discussions about progress that helped both sides learn and agree how to adapt the TROPSP project to suit the work-based aims and objectives.

There is an obvious bias in the action research process that many be considered by some to constitute ethical issues – that of the researcher being part of the project process, conducting changes at the same time as evaluating progress (Gummerson 1991). The premise behind this project is that bias is welcomed and a necessary part of collaborative working with the client.

3.1.5. Evaluation of the change project

The evaluation (*see Exhibit A6*) was commissioned by the client, and conducted by a third party. The researcher had no input either formally or informally with regards design, theoretical underpinning or any other stage of the process.

Chapter 4: Project Activity

The TROPSP programme is described and evaluated in the *Exhibit Part B: Section A:6 – NHS Trent Region external evaluation – specifically pages 4-14.* In addition the progress of this doctoral project and the delivery of outputs is detailed in *Exhibit Part B: Section A:6 – Summary of Progress against plan.* It is not the intent in this section to repeat what is covered in these exhibits. Instead, a description of the researcher's key activities as related to the TROPSP are listed:

4.1. Continuously developing the project process

The TROPSP was delivered jointly with Dr Tim Wilson and the researcher spent time before and after each session, reviewing progress and evaluations with Dr Wilson to work out how to adapt the process to deliver improved results. Although there is a fairly standard method for CI programmes, the researcher extracted and applied the lessons as the project progressed, thus influencing the progress of TROPSP on a month-by-month basis. These evaluation processes and cycles of learning were the main action research activities that the researcher carried out during the project.

The researcher maintained a learning diary throughout the project. The aim of this was to extend the reflection activity from a descriptive reflection of the past, to an activity where new ideas could be generated. This involved looking back over the notes to identify possible patterns and also to step back and note whether anything important might be being missed due to personal mental models. For example, reviewing the log with a colleague, the researcher discovered little had

been noticed or recorded about the way the teams were struggling with measurement processes. The researcher, then went on to test out some changes to improve the processes.

The ability to continuously adapt the TROPSP was only possible because the stakeholder trusted Dr Wilson and the researcher, and was prepared to accept many and frequent changes. This enabled a true action research process, where each cycle of learning was given the opportunity to be tested in another situation. The TROPSP turned out to be a very good example on which to use an action research methodology.

4.2. Extracting lessons from the literature and testing out new ideas

TROPSP provided the researcher the opportunity to test out a new form of mapping where teams work together to identify what their current systems 'looks like' and how they can then improve it. This new system is called stock, flow and trigger mapping (SiFT). The researcher developed this from the computer modelling techniques used in systems dynamics and then linked these to the concepts of capacity and demand scheduling.

The reason for developing a new mapping technique was that evidence from the literature (see 4.3.7 & 4.3.8 above) suggested that mechanistic approaches may not be very successful when teams are dealing with complex issues and in complex contexts (also see *Part B: Section C (ii) 2 and 3*, where the researcher and Dr Wilson discuss some ways of identifying and working with pattern in systems).

In SiFT the teams are led through a process where they identify all the 'stocks' (places where older adults accumulate e.g. wards, nursing homes, at home), then identify the 'flows' (the directions that they move in) and then finally the 'triggers' (the activities or decisions that trigger a move from one stock to another). This results in a messy looking map – namely a type of map that best describes their system. It is different form process mapping or care mapping which is designed to provide a more linear, step by step set of directions. In contrast SiFT mapping tried to make the whole system more explicit.

The researcher and the project leader, Linda Tully, have been invited to present this work at an international conference in December 2002.

4.3. Extracting the essence of *better ideas*

The literature review suggested that individuals were more likely to adopt ideas that detailed solutions developed by others (see 1.2 & 2.3.2 above). The CI methodology uses the term *change catalyst* to describe the essence of / the ideas underlying the identified good practice. For example, a single assessment form may be regarded as good practice; so one of the change catalysts, the underlying better idea, is that the same form is used for all professions, or, the patient only provides their personal information once. The concept of sharing better ideas / change catalysts is that they avoid someone saying "That won't work here – we are not allowed to use those sorts of forms" or "That won't work for use because our organisation is different". Instead, teams are encouraged to see how they can reinvent the ideas into their own context, developing their own bespoke solutions.

Change catalysts were introduced in the early stages of the TROPSP, following a literature search of good practice in relevant TROPSP project areas. However, these do not appear to have made much impact. It was interesting to note that individuals and teams preferred to discover these themselves (Norman 1999;Puliyel, Puliyel, & Puliyel 1999;Whitehouse & Lloyd 2000). Another issue is that they appear a little abstract and teams found it difficult to make them relevant to their own context (i.e. the project process was contravening a key principle of adult learning – that content needs to be relevant to the current situation(Bolton 1985). So, while the intent was to shortcut the learning process for teams, they had little impact. Use and discussion about change catalysts was therefore dropped about half way through the TROPSP.

4.4. Producing supportive documentation and training others

A key role for the researcher was to provide documentation for the teams to help them with their role. Most of these are in Part B as exhibits.

- The three books (*Part B: Section C (i): Numbers 1, 2 and (ii) 4*) by the researcher were provided to all participants in TROPSP for their use in the project. The books were finalised after the start of TROPSP and reflect the early lessons from TROPSP.
- The communications Framework (*Part B: Section C: No. 3*) was key in providing teams with a format to structure their thinking around how good practice will be spread beyond their involvement with TROPSP. The

external evaluation reported that two thirds of the teams felt they had learnt a lot about communication. Their storyboards presented at each workshop were also very creative and many used multimedia, with tape recordings of patient interviews. There were also many newsletters and other types of communication activities conducted.

- On the same theme of communications, a booklet about presenting at workshops (*Part B: Section C (i): No 10*) was provided to all participants and used by them when they developed sharing presentations.
- Short workshops were run at TROPSP on the topic of spreading good practice, to enable the participants to deepen their understanding of the theory and to see how it may be applicable to their circumstance (*Part B: Section C. (iv) No 3)*

Chapter 5: Project Findings

This chapter focuses on the highlights and some of the difficulties of the doctoral project activity, with particular reference to the researcher's personal learning themes; spreading good practice, making sense, working collaboratively and developing individuals. These are listed here briefly as they are discussed in more detail in the following chapter – conclusions and recommendations.

5.1. Spreading good practice

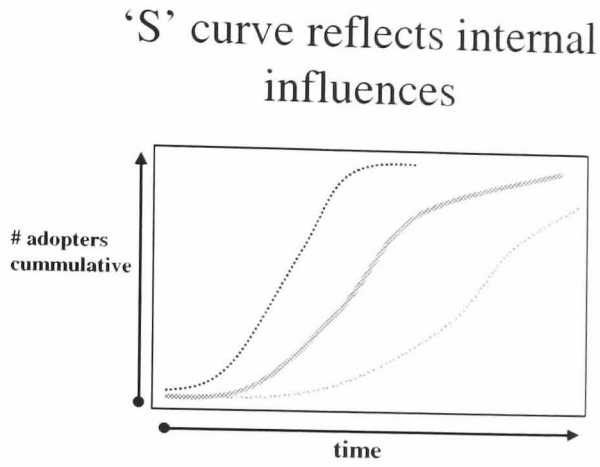
TROPSP was a complex project where many different professions needed to work together, across multiple organisations (statutory and non-statutory) to deliver improvements. They had the opportunity to implement good practices from elsewhere into their own system, and to develop new good practice and then spread it to others.

The literature suggested there would be some issues over the use of either a diffusion model for spread (passive, happens anyway) or a more interventional, management led stance (see 2.3.1, 2.3.7, 2.3.8 above). The CI methodology fortunately lies between the two stances; the framework and organisation of the project is quite prescriptive, however, within it, there is ability and room for a more passive process of spread and adoption. However, the process is by nature more interventional than passive. This raises the issue of whether the diffusion of innovation theory which has a passive, social orientation, is the appropriate one to describe, explain or understand the spread process that is part of the CI methodology.

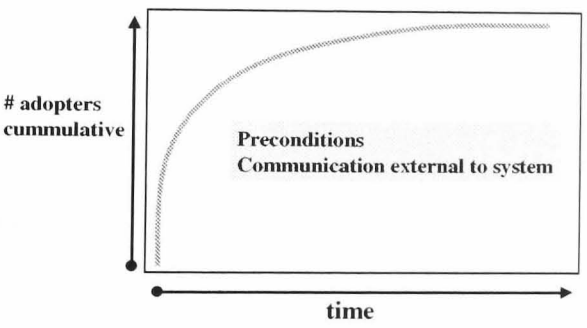
The diffusions of innovation theory is useful in understanding what might happen and in thinking through ways to work with individuals. The usefulness appears to be when this is combined with the theories from social marketing where there is a specific intent to 'sell' ideas and to influence behaviour. Social marketing is more directive, though not as interventional as a management led intervention. It still works within the social system and can go so far as to generate regulation, however, as it transcends organisational boundaries (it is usually aimed at individuals) it manages not to be as highly interventional as organisationally led projects.

The researcher found little evidence of the traditional diffusion of innovations 'S-curve' (see 2.3.3 above). Instead, there were a few examples of the external-influence curve. In contrast to the S-curve (Graph 1 below) where the adoption rate is a function of the internal motivations of the adopter, the external influence curve – called the R-curve and similar to the Bass curve describe earlier - (Graph 2 below) is a function of the amount of externally driven reasons for adopting (Coleman, Katz, & Menzel 1966).. For example, for some isolated individuals, they adopt new ideas as a result of an external marketing process, not because they have heard it from their peers. It was clear that a number of teams in TROPSP adopted better ideas as presented to them and not because of influence from their peers or personal motivation.

Graph 1: S-Curve reflects internal influences



Graph 2: 'R' curve reflects external influences



The implications for this are considerable as the S-curve is the predominant paradigm for understanding and encouraging the spread of better ideas. Once the researcher assessed that the S-curve was playing a minor role, reviews of the literature (especially prior to 1985 when Rogers' work appears to have become dominant in this field), indicated there were a number of different diffusion models, depending on whether the innovation was simple or complex, with many parts; whether the context was static or dynamic; whether the potential adopter population

was static or could grow/reduce; whether the innovation would sell itself to individual adopters or would be dependent on external communication. Interestingly, one of the functions of social marketing is to provide a communication process that is external to the immediate social system of the potential adopter.

TROPSP used the principles of social marketing – interventional activities designed to influence behaviour of individuals and groups (see 1.1. above) at the workshops and during activities between workshops. The final conference was a celebratory one that used regular marketing techniques (use of branded items) as well as practical techniques (such as using powerful messages from patients and carers to get the messages across to the audience). This is more allied to the external-influence curve than the S-curve of internal influence. So the interventions used in TROPSP were seen to be externally motivated, moderately successful and as social marketing activities, distinct from the more tacit social processes than affected teams during the large group workshops.

Another area that diffusion of innovations tends not to cover is that of context. In this project, local context mattered enormously – from the level of participation through to the ability to generate and maintain improvements to services. Each team represented a different geographical area and covered rural communities through to urban conurbations – some of which had high deprivation. During the process of TROPSP every team had members whose organisation changed form; from primary care group to primary care trust, mergers, hospital

mergers, dissolutions of community trusts etc. This provided a very complex context and the researcher's view is that the teams did very well to develop improvements in such chaotic times.

The CI methodology has traditionally been used in hospital pathways and not for such complex areas such as TROPSP (Norling 2002). It still works, though one could argue not as well. This calls into question as to whether this CI methodology was the best one to spread good practice in this instance.

The external evaluation suggests most participants found the process one which helped their personal learning. The areas that caused most concern were those of measurement and data collection. This could be because the complexity was under estimated. When combined with the issues about team working (see 5.3. below) it may have been possible to use the resources available for TROPSP in a different way to achieve the same or better results. Without the opportunity for testing this hypothesis, it will remain only a possibility.

Both diffusion of innovations and social marketing theories suggest the role of the opinion leader is important in the spread and adoption of better ideas (see 2.3.6. above). At the start of TROPSP the researcher tried to help the teams understand the concept of opinion leaders and to identify them so they could use them to influence the change process.

What emerged was tremendous difficulty in working with this concept. As opinion leaders are only opinion leaders for a specific topic and as each adopter may

use different opinion leaders for variations on a similar topic, the whole process of formally identifying opinion leaders turned out to be impractical.

Also, the teams encountered the difficulty where they did find opinion leaders who really were influential in the system, however, when they formally identified them, their influential power was lost. This happened because their peers, who respected them as critical evaluators, saw them as 'on the side of the managers'.

5.2. Making sense

This learning theme concerns the use of models, theories and processes to help the researcher, other individuals and teams, to explain the phenomena they experience and observe.

For the main part, this project (which counts for just over one third of the total doctoral programme) focused on the literature and frameworks of the diffusion of innovations, social marketing and associated theories. Other paradigms that have not been reviewed for this project, though are recognised as possibly important, are knowledge management, psychology, linguistics (especially semantics) and organisational / personal change theories. These have been covered to some degree in the various deliverables from this project, such as the books and papers.

The findings with regards to this theme suggest that no one theory or perspective is wholly able to explain the personal, interpersonal and social phenomena experienced in TROPSP. It was a benefit to be able to draw on the various different disciplines, though this worked best when the researcher did this in isolation from the TROPSP teams as it had the possibility of creating confusion. Most of the work by the researcher with the teams, was in the role of practitioner, where the various models and frameworks could be used in a personal way to help individuals and teams make sense of what they were experiencing. This was done through a process of dialogue and inquiry, rather than presentation of the theory.

5.3. Working collaboratively

The methodology used by TROPSP was called "Collaborative" and as such created an expectation that the project process would be one where individuals worked together, worked on mutually agreed tasks, focused on common aims etc. To a large extent this was achieved, however, the understanding of collaborative can work at a number of levellers. The methodology assumed that teams working together = "collaborative". However, the underlying level and work within teams and across organisations back in the community proved to be more challenging and a far more significant issue for the project process.

The researcher had participated in a number of national collaborative improvement programmes as lessons from those suggested that teamwork was an issue to be addressed. As a result an additional 24-hour workshop was added to the

process and run at the start of the TROPSP. Teams were invited, along with their CEO, and they spent the time discussing and learning about teamwork issues.

The evaluation conducted by an external contractor did not seek or discover the issues that arose due to the difficulties teams had in managing the dynamics when at meetings (at the workshops or in the workplace) or the issues in working with other teams in the workplace. The TROPSP teams were exceptionally diverse and included as many as nine different professions and many also included an 'older person' to represent the stakeholding group. While not explicitly assessed there is a correlation between team performance and ability to work together, and the results gained in the project. Additionally, the teams with the most difficult dynamics appeared to have the most difficulties and negative feeling about the process. Investigations by the researcher into other issues in the workplace which involved the individuals on the team, suggests these teams experiencing 'difficulties' in TROPSP mirror the same problems elsewhere. This appeared to be as much a problem for their context as it was for them as individuals or the group.

5.4. Developing individuals

In the external evaluation of the TROPSP, team members indicated that they found the process worthwhile and around three quarters of all participants felt they had learnt a lot; about communication, improvement techniques and the care of older adults.

Each workshop had a number of skill building sessions available to participants and in addition there were development sessions held every couple of months for the project facilitators and team leaders.

A key learning was discovering that 'just in time' training was essential. For example, project management training was provided at the start of the project. However, it was repeated, at the request of the team leaders, about one third of the way through the programme. What became evident was that they needed to have more experience against which to link their learning. As a result of this, the learning sessions were altered for the remainder of the programme, to ensure coherence with the stages of the project.

This theme was a lesser priority in this part of the doctoral project – it formed a greater part in the RAL stage.

Chapter 6: Conclusions and recommendations

These conclusions and recommendations are ones that the researcher will apply to future similar work with clients in the NHS and in other countries. A number of papers are being prepared for publication so these conclusions can be more widely shared.

6.1. Caution in use of diffusion of innovations theory to underpin managerial activity

The ultimate paradox arising from this project was the one where the researcher was trying to use a social process based theory to underpin what was a management based hierarchical process. The CI process is tightly structured though there is ample time and space for the social processes to take place. However, the bottom line is that this was an intended project, not one where the social system chose, of its own accord, to participate and adopt better ideas. The TROPSP project was successful according to the objectives set and achieved.

There is a dissonance in using social constructionist and marketing theory to support managerial interventions. Social marketing generally uses hands off type interventions such as advertising and promotions. Interventions such as improvement projects are much stronger and more managerial in nature and the fit between the two approaches can be difficult.

Whether the adoption of innovations can be considered as a factor of the social process, social contagion, is contested, especially when there are strong traditional marketing activities going on at the same time. Investigations into

prescribed drug adoption, where marketing takes place suggests that the marketing activities have a greater effect than social contagion (Van den Bulte & Lilien 2001).

Diffusions of innovation theory is weak in predictability and even Bass modelling is insufficient to predict the rate and breadth of adoption of a better idea in a system as complex and dynamic as the NHS.

Recommendations

The diffusion of innovations theory has some useful concepts that help modernisers understand how better ideas may spread in their system. However, as this is based on descriptive evidence, anyone leading a project should be cautious about predicting results based on a theory that is not designed to predict the rate of adoption in any event, and certainly not in the case of complex sets of better ideas.

As to the difficulty in predicting the take up and rate of adoption in a system, caution needs to be taken when making decisions based on predictions, especially when there are limited feedback loops in place to assess adoption rates on a real time basis (Bloom et al. 2000).

6.2. Managing perspectives and expectations

The whole notion of 'spreading good practice' has a built in perspective from a specific point of view; from the definition of what is good, through to the imperative that others should adopt it. Within the public sector the consideration is the attempt by one group to impose its ideas on another, with ensuing implications (Traynor 1999). The ethics of adopting better ideas is an issue for clinicians, as

much as it should be for managers (Bunch & Dvonch 2000). How do you know the result will be successful – or even appropriate, in the new context? What degree of risk is appropriate in public sector services? Questions like these are often neglected in policy statements and national improvement programmes.

Why do managers and clinicians care about spreading good practice? One reason is the perceived urgency to improve the services and experience of care a patient receives in the UK. The sense of urgency implies that managers need an understanding of the factors that enable rapid adoption of 'approved' better ideas (Savitz, Kaluzny, & Kelly 2000). For every piece of 'evidence' there is about what works in improving healthcare services, there appears to be a counter piece of evidence that no real impact on clinical outcomes is achieved (Shortell, Bennett, & Byck 1998).

Recommendations

Any individual or group embarking on an explicit strategy to 'spread good practice' should consider the ethical issues involved and spend time assessing the implications, positive and negative, for their particular stance. Making their view explicit is a significant step as this awareness should provide those who are intervening in the system by encouraging the adopting of specified ideas with awareness of the potential consequences of their imperative.

This step is similar to that involved in assessing the ethical position of the researcher in an action research project or evaluation and more could be learnt from

applying these concepts to regular improvement project management and also the issue of evidence based medicine.

6.3. Appreciating the context

Complex and continuously adapting and evolving contexts need frameworks and models that help them work with, rather than constrain, their circumstances. A flexible, outcome orientated approach is required which takes account of the variability inherent in circumstances and context (Fontaine et al. 1997).

Recommendations

The tendency to create a single model is strong. Often a short cut to explaining what needs to be done, complex processes and behaviours are reduced to simple explanations. Whilst these may help with understanding the concepts, the use of static models may create a group of modernisers who lack the deeper understanding about the influencing, spread, adoption and change process. Thus a key recommendation arising from this project is for managers to avoid the temptation to develop singular models and frameworks, and instead, enable discussion, reflection and learning by participants in change processes so they can develop their own perspectives and understanding. This may appear to take longer, though in the long run may prove to be more thorough and enduring.

6.4. Paying attention to organisational processes

Many of the barriers to change reported in the literature and experienced by TROPSP project teams were organisational in nature; boundaries, power relationships, lack of funding, unclear decision-making processes, lack of commitment from senior leaders etc.

Recommendations

Organisations, specifically the top teams, need to appreciate the benefits and possibilities of the spread of better ideas. This includes being open to ideas from elsewhere, as well as enabling the testing out of new ideas in their organisation. New initiatives need to be linked to organisation goals (Rosenheck 2001).

The current strategy in the NHS of nationally and regionally led programmes of change focused on specific project topics has the advantage of gaining some quick wins, however, for the local teams to progress to more fundamental changes, and ones that will sustain, they need their work to be integrated into the fabric of their organisation. This suggests that a modernisation strategy that focuses on the local community may be more effective than the programme based one like TROPSP.

6.5. Enabling team working

The TROPSP teams experienced constant changes as members left to start different roles, and new members joined. These were extremely diverse teams and

although the researcher was aware of the need to focus on supporting team development it appeared that the activities and focus was insufficient for many of them. The external evaluation and the researcher's observations indicated this.

Recommendations

TROPSP held an additional workshop aimed at supporting the team building process. However, this ended up insufficient for reasons identified in 5.3 above. These suggest that the emphasis of training and facilitation should be moved from improvement science (process mapping, data management, statistical process control etc) and more time spent training and facilitating teams on the 'softer' issues. Techniques such as coaching, team working, group facilitation techniques etc., in hindsight, appear to be more useful.

The recommendation is for similar improvement programmes in the NHS to spend more time on the people and team dynamics issues than the more technical approaches.

It would also be useful to test whether similar levels of improvement can be achieved without resorting to the language and techniques of 'improvement science'; namely to use facilitation and goal driven techniques. A recommendation would be for one national NHS programme to test this out by running two different methodologies at the same time, with the teams split into two separate groups.

6.6. Working with key influencers

As attempts to identify opinion leaders appeared to have a negative impact on the change process, the TROPSP shifted to a more informal identification and working with key influencers – whoever they may be as perceived by the team member (see 5.1 and 2.3.6. above).

Recommendations

Currently in the NHS there is a lot of use of the label 'champion' to label an identified opinion leader and make them apparent to everyone in the system. This is particularly true for 'clinical champions'. Evidence from this project suggests a far softer and less obvious approach may be more suitable to avoid the risk of genuine opinion leaders (champions) losing their credibility with their peers who think they have 'joined the other side'. In addition, those using the term need to be cautious about how much can be achieved by a labelled champion.

It is therefore better to work in the informal social system and to avoid using labels and job role descriptions that may be misunderstood. Identified opinion leaders need to be provided with support, yet those who are not part of the social system of opinion leaders need to be cautious not to interfere in it creating adverse knock on consequences.

6.7. Taking care in adopting models developed in other cultures

Some feedback in the evaluation of the TROPSP highlighted the dissonance caused by what appeared to be 'American' terminology and processes. This was felt

to be inappropriate by some team members. Early research work by Jesper Olsson (Ph.D candidate Chalmers Institute, Linkoping, Sweden – unpublished) is suggesting that the American Organizational Change Model needs to be translated not only in language but also in content if it is to work effectively in Sweden.

Recommendation

Care and attention should be paid to the language used when importing models such as the IHI Breakthrough Collaborative Improvement, which was used in TROPSP. In the same way that better ideas are reinvented locally, new models should be piloted and made more local before being widely implemented in the NHS.

6.8. Designing in scalability

The majority of the literature and NHS programmes of change rely on pilot schemes and then an attempt to push the results across a wider system. Each pilot location will produce results that are context dependent and it is difficult to assess the whole of the improvement and dissect it into small parts that are easily adopted.

Recommendation

The NHS should consider a form of piloting innovative practices where the design of the innovation takes into account that it will need to be spread to others. This is not the same as a reTROPSPective analysis, but rather a deliberate design of the solution so it can be more portable and implementable in other areas. This is a

strategy used by NGO's when working in under developed countries and it has proven a useful means of accelerating the spread of innovative practice.

6.9. Moving from the perspective of the change agent to that of the adopter

The management paradigm is one that sees the organisation and managerial activities as the centre of the work, and the potential adopters those individuals who can benefit by adopting better ideas. From the change agent perspective the better ideas are packaged as something to sell and for others to action. The experience in this project mirrors developments in the area of social marketing where the sellers are spending more time understanding the buyer and seeing the better ideas from their perspective (Achrol & Kotler 1999).

The researcher's dilemma at the start of the project on how to define the various spread and adoption activities (*see Chapter 1, Section 1.3*) reflects these different views on how to approach, or market, better ideas.

Recommendations

A focus on social marketing, rather than diffusion of innovations, will lead project leaders and policy leads to focus more on the *where* and *to whom*, they are marketing their new ideas.

The researcher has the opportunity to take these recommendations to a European Group assessing how the CI methodology can be improved, in February 2003. In addition, they will be passed to the NHS Modernisation Agency in a meeting in December 2003.

6.10 Summary of Impact on Professional Practice

- **The concept, issue and implementation of the spread of good practice is now a regularly discussed topic in the NHS**; the researcher has contributed significantly to the development of the ideas about the spread of good practice, as well as contributing at a practical level through work based projects. The concern to the benefits of spread is evidenced in government policy documents relating specifically to the NHS and every NHS organisation is now required to have a policy and concern for the spread and adoption of good practice. The researcher's contribution has been at many levels; from academic and analytical support, through to training, development and project delivery.
- **The NHS created the Research into Practice Team, with initial guidance from the researcher, to investigate the spread and sustainability of good practice**. Working with this team, the researcher has contributed to worldclass assessments, evaluation and reports. The NHS is gaining

recognition as one of the largest and most influential organisations with regards learning about the spread and adoption of good practice. In previous years the large corporations such as British Petroleum and Shell Oil have been leaders in this field; the NHS is now their peer.

- **The researcher has presented to and trained over 15,000 people on the concepts and techniques of the spread and adoption of good practice**. Nearly a quarter of these have been outside the UK. Sales of the researcher's books indicate there is significant interest in the techniques developed during this D.Prof programme, specifically in the USA, Canada and the Nordic Countries.
- **The researcher has contributed breadth to the debate about what models and frameworks are useful to understanding and encouraging the spread and adoption of good practice**. At the start of this D.Prof programme the NHS predominantly used only the Roger's Diffusion of Innovations framework. However, the work based programs and deliverables of this D.Prof programme indicate the breadth of discussion and debate which is now including social marketing, psychology, communications theory and relational marketing.
- **Large-scale national programmes designed to spread good practice have been instigated in the NHS**; these implementation programmes involve around 50,000 NHS staff in spreading and adopting good practice. It is probably one of the largest change programmes (in terms of scale) in the world.

- **The researcher is now established as an international consultant with bookings to work in countries in Europe and North America, up to 2 years in advance**. This D.Prof programme has provided much of the discipline to develop the speciality area of spreading good practice.

Glossary of Acronyms

In order of appearance in the report

TROPSP	Trent Region Older People Services Programme
NHS	National Health Service
S Curve	Shape of Diffusion innovation curve showing number of adopters over time
PDSA	Plan-Do-Study-Act cycle of change based on iterative cycles of learning
CI	Collaborative Improvement; a form of change methodology
CEO	Chief Executive Officer
RAL	Recognition and Accreditation of Learning
OL	Opinion Leader
NGO's	Non Governmental Organisations

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A1: D.Prof Programme Design

D.Prof (Interprofessional Social Marketing)

Composition of Programme of Study

Module No.	Module Title	Credit Points	Level (4 or 5)	Semester for completion of module	Year	Completed/ not completed
DPS4825	Research Methods	**20**	4		2000-01	completed
WBS4840	Research Project		4			
RAL @ Level 4	Research Methodology	**40**	4		2000-01	completed
DPS4520	Review of Previous Learning	**20**	4		2000-01	completed
RAL @ Level 5	Doctoral Project activity	**120**	5		2001-02	completed
DPS4521	Programme Planning and Rationale	**20**	4		2001-02	completed
DPS5140	Project module	**140**	5		2002-03	completed

Total number of credits for the programme: 360

A2: D.Prof research project aims and background

Project Aim

To identify and implement techniques that accelerates the spread of good practice within the NHS; to apply these and to train others in their use.

Award Sought

D.Prof (Interprofessional Social Marketing)

The spread of good practice is based on communications and social marketing theories as well as the diffusion of innovations. The professional area targeted in this work is that of improvement and social programme replication. There is no one specific profession for which this work is relevant; rather, it crosses the boundaries of professions. For example, clinical practitioners looking for ways to spread the use of clinical guidelines would find this work as applicable as managers or policy leads who are looking to improve the use of resources by implementing good practices discovered elsewhere.

The context is how pockets of innovation and good practice can be spread from one part of the organisation or country, to other parts. It is based on

social learning activities and the aim is in the context of improving circumstances. This title excludes the more project and management process orientated methods of managing change across systems, and places this project clearly in the more dynamic and social framework within which behavioral systems operate.

Importance of the study

The variation in performance between individuals and organisations within the NHS is increasing. One way to improve services to the population is to reduce this variation. Spreading existing good practice is key in this variation reduction process. The NHS Modernisation Agency has spread as one of its key aims.

There are a number of national programmes and Collaboratives underway in the NHS. It is expected that this activity will make a contribution to providing direction and clarity of purpose to these activities. The outputs, in the form of a book and workbooks will help others learn how to spread good practice in their health communities.

There is a growing requirement for government departments to work together on this topic as well international interest in this work, specifically in

the USA and Scandinavia, as highlighted by the invitations for the researcher to present work and by the offer of consultancy contracts to support projects in other countries.

The topic of interprofessional social marketing is without doubt an important one for healthcare throughout the west as organisations and governments struggle to find ways to maintain quality whilst adapting to increasing customer demands and increasing complexity of technology.

Background and description of the project

The NHS Plan[i] announced in July 2000 set challenging demands for National, Regional and Local health communities in the ways in which they need to improve the delivery of healthcare services. A number of change and improvement methodologies are being used, such as business process re-engineering (Leicestershire), lean thinking (Kent), and theory of constraints (Oxfordshire).

One of the key methodologies recently imported into the NHS from the Institute of Healthcare Improvement (Boston) is the mechanism of Breakthrough Collaboratives; these are time limited, usually one year, improvement projects whereby 20 or more teams come together to spread existing practices across multiple settings[ii, iii]. A series of three 2-day

workshops are interspersed with action periods during which the teams deliver small cycles of change with results that are measured against the global aims of the Collaborative. This methodology leverages social and discovery learning processes[iv].

Most of these Collaboratives have been run on a national basis, such as the Primary Care Collaborative, Cancer Collaborative, Medicines Management Collaborative. These have also been fairly discrete and targeted efforts with clear goals and outcomes, and participating teams that come from single organisation.

The NHS Trent Regional Office, which was one of eight NHS Regions in England before changes in 2001 meant the organisation merged with others to form only four supra-regions, set up the infrastructure and support to run a highly innovative Collaborative based on delivering the Older People's National Service Framework. This was focused on the discharge and transfer of patients between hospitals and other places. This was a challenging project for a number of reasons:

- First of its kind in the UK to work across health and social care, statutory and non-statutory agencies; including voluntary groups, ambulance services, and community groups. The high degree of organisational and

team complexity required new and as yet untested methods for working together in ways that deliver measurable improvement

- Whilst there are existing good practices for discharge and transfer of patients, these are usually limited to innovation within single organisations; this project looked to apply existing knowledge and also discover new and novel ways of delivering improvement

- Trent Regional Office had participated in two Collaboratives and as such were experienced in the process. This project was used to stretch the methodology and to discover new ways of delivering results for complex projects.

- The NHS Modernisation Agency is testing out numerous methods for spreading good practice from one location to another. This project, due to the number of organisations and professions involved, provided a fertile test bed to learning about how individuals and teams change their behaviours through adopting existing practices.

The NHS Trent Regional Office sponsored this project and there was a Project Co-ordinator, Linda Tully, supported by three full-time project

leaders. A tender was issued for the provision of consultancy services and this was won by a partnership, including myself.

The consultancy partnership comprised myself, Dr Tim Wilson and Paul Plsek. Paul is an internationally renowned expert on quality improvement, complexity science and collaborative improvement. Tim Wilson is a general practitioner who is also the Director of the Quality Unit at the Royal College of GP's and has completed a Harkness Fellowship where he spent 6 months in the USA working alongside the Institute of HealthCare Improvement in Boston.

This D.Prof research project used the TROPSP project as a base where theories and practices could be tried and tested. To spread innovative practices developed around the country, a combination of change management, education and communication theories was required. This work based research project was designed to explore new ways of bringing these theories together and to identify methods of achieving the spread of good practice.

This project focused on the education and communication methods rather than specifically the change management techniques required. There is substantial literature and consensus about how change management can be approached, enabled and supported. There is, however, little consensus or

literature specific to the healthcare environment that investigates how knowledge and practices spread throughout a working community or system. Most of the literature on the diffusion of innovation looks at how one innovation spreads throughout a population. However, most innovative healthcare practices are far more complex and are being spread within systems that experience competing innovations for adoption. There is also a high innovation bias within the NHS, which means there are a number of individuals and bodies that are demanding their ideas are implemented, as they perceive them to be the best. All this noise creates a resistance to change.

The predominant method for post professional qualification / initial experience training and development within the NHS is face-to-face, through workshops, conferences and one-to-one sessions. Many NHS staff are excluded from personal and team development opportunities, which includes the potential to learn about and adopt new working practices, due to time constraints or programmes that do not suit their learning style. Delivering practical and relevant development programmes to a multi and inter-disciplinary workforce is challenging and needs a radical approach.

In short, mass instruction and communication is required, yet needs to be achieved in an individualised way. New and cheaper multi media technologies are becoming available. There is a significant body of evidence

in the methods and frameworks for developing 'curricula' that deliver learning outcomes.

It is to this body of knowledge, or lack thereof, that this D.Prof project contributes. Many of the papers and books published resulting from this D.Prof work and other consultancy work carried out over the past 18 months have provided new knowledge in a rapidly growing field of social marketing.

This project set out to investigate how innovative communication methods can be matched to a communication process using the concept of opinion leaders. The research project was designed with a flexible and adaptive approach and deliverables in small chunks. The quantity and timing of deliverables also takes into account demands by other clients.

The underlying principles for this project were

- To assist the TROPSP Collaborative to achieve its objectives on spreading innovative practices within the Trent Region
- To support others so they can enable the spread of good practice to individuals and organisations
- To develop a framework for developing a 'spread strategy'

- To provide a number of 'products', such as workbooks in a timely manner so they can be used by colleagues in the delivery of their work programmes both within and without the TROPSP Collaborative
- To learn through doing and piloting
- To apply evidence on what works
- To acknowledge and share best practice
- To enable a flexible development and implementation process

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i Department of Health. The NHS Plan: A plan for investment, a plan for reform. Document # Cm 4818-I. HMSO, London. July 2000.

ii Kilo CM. A framework for collaborative improvement: Lessons learned from the Institute for Healthcare Improvement's Breakthrough Series. Quality Management in Healthcare. 6(4): Summer 1998:1-13

iii Kilo CM. Improving care through collaboration. Pediatrics vol. 103, no. 1. 1999: Supplement: 384-393

[iv] Wilson T, Plsek P, Berwick D, Cleary P " Analytical study of collaborative improvement: Experience and thoughts from seven countries to understand the underlying functions of collaborative improvement." - pending publication

A3: Summary of progress against plan

The learning agreement (DPS4521) submitted in May 2001 stated eight deliverables, most of which have been achieved. The deviances to plan were for specific reasons and these are discussed in the next section.

(1) Produce a framework for implementing a strategy for the spread of learning resulting from the TROSP; initially within the Region but also to consider spreading throughout the NHS

- Framework developed though implementation in this project was limited due to the nature of the TROSP project outcomes
- Published in Health Management, June 2000 as "*Spreading good practice; how to prepare the ground*".
- Published a chapter (Lead author) called "Supporting the spread of good practice" in "Idealised Design of Office Practices: Fieldguide", May 2001
- Development of web based training module for Institute of Healthcare Improvement (USA) and Case Western Reserve University, "Techniques for spreading good practice".

- Framework has since been used in other Collaborative projects (Medicines Management) where it has demonstrated its worth
- Original framework has been further developed with colleagues in the USA
- Paper accepted for publication May 2003 in Education in Primary Care: - SW Fraser & P Plsek, "Translating evidence into practice: can it be done through the process of spread?"

(2) Produce an evolving bibliography on the 'spread of good practice'

- Summaries are written and continue to evolve
- Not yet published on website, though the site is ready. The researcher prefers not to publish for competitive reasons as it represents the value added as an independent consultant

(3) Produce a workbook to help leaders design ways to scale up innovation across systems

- Completed and published by Kingsham Press in 2002 as "Rolling out your project; 35 tools for healthcare improvers" (ISBN 1-904235-08-5)

(4) Present at two international conferences, the framework developed for the workbook above

- ½ day minicourse run in December 2001 at the USA National Forum on Healthcare in Florida
- 1 day minicourse run in March 2002 at the European Forum on Healthcare in Edinburgh

(5) Produce and have published (contract is already in place) a book called "Accelerating the Spread of Good Practice: A toolkit for healthcare"

- Book was substantially edited following the early experience of TROSP, and published in 2002 by Kingsham Press as “Accelerating the spread of good practice; a workbook for healthcare” (ISBN 1-904235-02-6)

(6) Produce a workbook on how to identify and support opinion leaders; submit learnings from this for an international conference

- SW Fraser, "Identifying opinion leaders", Improvement Bulletin, June 2001
- SW Fraser, "Using personality preference typing to identify opinion leaders", (*not published*)
- The workbook was not completed due to the difficulty and negative impact of identifying opinion leaders (see discussion below)

(7) Produce a workbook on communicating for spread; submit learnings for presentation at an international conference

- Completed and published as a short guide, "Presenting at workshops; guidelines for collaborative programmes", September 2001 (ISBN 0-9541360-0-4)
- SW Fraser, "Understanding how communication can support the spread of good practice", Clinical Governance Bulletin, Oct 2001
- SW Fraser, "Tips for assessing how good practice spreads", Clinical Governance Bulletin, May 2002 Vol 3 No 1

- Presented in a workshop in Toronto May 2002 run by the Continuous Quality Improvement Network.

(g) Produce a paper, with colleagues from the TROPSP project, combining the topics of complexity, collaboration and spread

- This has been accepted and will be presented, jointly with the TROSP Project Leader (Linda Tully), at the USA National Forum on Healthcare in Florida in December 2002

Publications not in the learning agreement as deliverables, but completed and relevant to personal learning themes (themes in brackets after each item)

- SW Fraser, T Wilson, K Burch, "A picture really is worth a thousand word", Clinical Governance Bulletin, June 2001, Vol 2 No.2 (Making sense)

- SW Fraser & N Edwards, "Breaking down the barriers", Health Management, August 2001 (Working collaboratively)
- SW Fraser & N Edwards, "Managing networks and measuring success", Health Management, August 2001 (Working collaboratively)
- SW Fraser & P Greenhalgh, "Coping with complexity; educating for capability", British Medical Journal 323 799-803 (also translated into Russian) (Developing individuals)
- SW Fraser & T Wilson, "Understanding the systems", Health Management, February 2002 (Making sense)
- SW Fraser & T Wilson, "Understanding the system-part 2", Health Management, March 2002 (Making sense)
- SW Fraser, K Burch, M Knightly, M Osborne, T Wilson, "Using collaborative improvement in a single organisation; improving anticoagulant care", International Journal for Healthcare Quality Assurance, Vol 15, Nos 4&5, 2002 (Working collaboratively)
- DE Haun, A Leach, R Vivero, SW Fraser, "Houston we have a problem", Joint Commission Journal on Quality Improvement, Aug 2002 (Making sense / Developing individuals)
- SW Fraser, "The patient's journey; mapping, analysing and improving healthcare processes", Kingsham Press, 2002 (ISBN 1-904235-09-3) (Making sense)

- NHS Modernisation Agency, "The improvement leaders guide to spread and sustainability", July 2002 (editorial board member and contributor) (Spreading good practice)

A5: Researcher's reflective learning report

This reflective summarises the researcher's learning. As this is a reflective report it is written in the first person.

When I embarked on this D.Prof programme and this D.Prof project in particular, I had a fairly open mind about what it would entail and what I would learn. To manage hindsight bias I kept a learning journal where I recorded my thoughts and reflections on a bi-weekly basis for an eight-month period. This reflective report summarises the comments made in this journal.

What I learned about ....

... action research

As a research methodology, action research has many aspects to commend it, however, there are also some debits to be considered. In this project I found the following:

Benefits	Disadvantages

- Formative nature of evaluation enabled myself and work colleagues to reflect and change some of the workshops and our approach as the project progressed
- It seems to be much easier to learn and develop when the reflection is so close in time to the work carried out
- Having to clear up the possible ethics issues before we started meant many problems were dealt with quickly
- The process involved a lot of dialogue with many people and I think this contributed to the narrative database and learning that ensured
- It is difficult to set out a project plan and then stick to it (e.g. opinion leader topic ended up difficult to pursue)
- Requires a very open and honest team to work with else the process could be threatening
- I found it incredibly difficult to separate out my learning from other projects; whilst I maintain some of the project boundaries, in the end it was not possible to keep them strictly in place
- Some of my colleagues involved in more 'traditional' research activities challenged me as to the validity and generalisability of action research outcomes. I countered this with the debate that all knowledge and

learning is linked to a certain context, and that there are many methodologies, the important thing is to use one that best reflects the aims of the project.

... myself as researcher

- I enjoyed the rigour of assessing and reviewing applicable theories
- This project stimulated a review of the literature and I developed new competencies in carrying out searches, managing references and writing short abstracts and reviews of what I read. This has turned into a valuable commodity and I have clients now that ask me to do this sort of work.
- I find it very difficult to maintain an objective stance, so I learnt that I am probably best in an action research role where my contribution can be reflected on and where I can develop my thinking without appearing as though I am changing the basis of my research
- Working on a research process with others is far more fun, constructive and productive than doing it on your own; I found working with Dr Tim Wilson very energising, even though we had many differences of opinion!

... other people and organisations

- That context is everything; without considering the culture and environment within which an individual is working, it is very difficult to find ways to enable them to change their behaviour
- That everything changes, and is changing, all the time
- That real life differs radically from the theory and that it is difficult (perhaps impossible?) to demonstrate one theory alone in action without resorting to a bias in the research
- That everyone has a point of view, and that point of view is correct and relevant to them
- There are many ways of looking at situations and assessing individuals and there is probably no right way

... applicability of theories

- Importance of using more than one theory and recognising each theory's limitations

- The usefulness of theories in opening up the possibilities for the project and for learning
- Their limitation in the real world
- The difference between taking a theory and trying to see it in action, and the ability to assess what is happening and then develop new theories (in my case, specifically new theories for how good practice can be spread and rolled out across systems)

... about my personal learning themes

- These themes emerged from work carried out early in the D.Prof programme and I was surprised to see they continue to be my main themes for pursuing learning and personal development
- The spreading good practice theme has been the major one for this D.Prof project and there were many overlaps with the other three themes (making sense, working collaboratively, developing individuals) that I had not anticipated. I am unsure whether the overlaps were there all the time or whether by concentrating on them, I 'created' the similarities
- The one new theme that seems to be emerging is that of '*leadership*'; this is not something I considered at the outset, and has only become apparent in the period of the writing up of this project

If I had known then what I know now...

I still feel the project as designed was of a reasonable size, though the number of outputs and deliverables agreed was high I managed to achieve those that were achievable. I'm glad the opinion leader work did not pan out as expected as this reinforced the nature of the action research nature of the project. It helped me to understand the action research process better, as well as deepen my understanding the practical aspects of the opinion leader theory. I believe this opinion leader work is an added bonus as it has brought new knowledge that was not anticipated at the start of the project.

The project, with its focus on deliverables, has made a significant contribution to my own practice and the development of my business as an independent consultant.

Sarah W. Fraser

October 2002

Updated July 2003